

On new species of Birds from the Rio Napo, in the Republic of Ecuador. By PHILIP LUTLEY SLATER, M.A.

ELÆNIA LUTEIVENTRIS.

Supra fusca unicolor, alis caudaque paulo saturatioribus; gutture griseo, abdomine medio et crisso cum tectricibus alarum inferioribus sulphureo-flavis, pectore et lateribus oleagineis; rostro et pedibus nigris.

Long. tota 5·3, alæ 2·8, caudæ 2·3, tarsi 0·6.

A typical *Elænia* of the same form as *E. pagana*, the type of the genus, but of smaller size, and differing in colouring from all members of the group with which I am acquainted.

CREURGOPS*, *genus novum, Lanioni et Trichothraupidi affine, sed rostro diverso. Rostrum breve, crassum, culmine versus apicem incurvo, gonyde vix ascendente, commissura modice arcuata, mandibula superiore dente mediali distincto et altero finali instructo; vibrissis rictalibus nonnullis: alæ modicæ, caudæ tertiam partem attingentes, remigibus secunda, quarta et quinta æqualibus et longissimis, prima his paulo brevioribus: cauda longa, apice quadrata.*

CREURGOPS VERTICALIS, J. Verreaux, MS.

Supra fuscescenti-schistacea, pileo semicristato saturate ferrugineo, hujus lateribus cum fronte nigricantibus: alis caudaque fusco-nigris; subtus ferruginescenti-ochracea: rostro nigricante, gonydis basi albida, pedibus fuscis.

Long. tota 6·2, alæ 3·2, caudæ 2·5, rostri a rictu 0·7, tarsi 0·85.

This peculiar Tanager seems to belong to the neighbourhood of *Lanio*, *Tachyphonus* and their allies, and, like the former, has a very sharply defined notch about two-thirds of the distance along the edge of the upper mandible. But the bill is otherwise very different from that of *Lanio*, being much shorter, broader, thicker, and more swollen, with the culmen much arched towards the tip. The single specimen which I have examined is not in very good condition, but its perfect distinctness from every known species of Tanager is obvious at first sight.—*Proc. Zool. Soc.* Jan. 26, 1858.

On the Genera Orbulina and Globigerina of D'Orbigny.

By L. F. POURTALES.

Hitherto the two genera of Foraminifera established under the names of *Orbulina* and *Globigerina* by D'Orbigny had been widely separated in the classification; he had even put them in different orders, although he had remarked the similarity in the structure of the shell. Ehrenberg also places them in different families (the former under the name of *Miliola*), but marks the two genera of *Miliola* and *Gromia* as doubtful, and appends to the characteristics

* κρεουργός *lanius*, et ὠψ *facies*.

of the family of *Miliolina* the query, "An status juvenilis reliquorum?" M. S. Schultze makes of *Orbulina* a family among his Monothalamia, whilst *Globigerina* is included in a subfamily of the family of *Turbinoida* among the Polythalamia.

I think I am now able to show, by numerous preparations, that these two supposed genera are only different stages in the cyclical or alternate generation of the same species. Having had an opportunity of examining large numbers of well-preserved specimens obtained from the bottom beneath the Gulf Stream by the U.S. Coast Survey, and entrusted to me for examination by Prof. Bache, Superintendent, I have found in nearly one-half of the *Orbulinæ* examined, young *Globigerinæ* more or less developed, and attached to the inside of the *Orbulina* by numerous very slender spicules. Only one *Globigerina* is developed in an *Orbulina*, whose cavity it gradually fills up, and whose shell it finally bursts to make its escape. At that time the *Globigerina* has already nearly attained its full size, and I have counted as many as sixteen cells in a specimen having yet room for several more before filling up the parent *Orbulina*.

How the *Orbulina*-form is reproduced I have not yet traced out. None were noticed of very small size among those examined. Large individuals are frequently found containing a smaller one filling the cavity exactly; the old shell is finally cast off, and appears to remain attached in fragments to the young one for some time. I am unable to say as yet whether this is to be considered as an act of reproduction, or merely as a renewing of the shell. It is not rare to find *Orbulinæ* with this double shell containing already a young *Globigerina*.

I hope to be able to follow out the whole chain of development of these beings; but the above facts have appeared to me interesting enough to be at once communicated.—*Silliman's Journal*, July 1858.

On the Anatomy and Development of the genus Myzostoma, Leuckart.
By C. SEMPER.

The discovery of a new species of *Myzostoma*, living, like the three others already known, parasitically upon *Comatulæ*, has afforded M. Semper opportunity for renewed studies on the affinities of this singular genus. The systematic position of the *Myzostomæ* remains as problematical as before. These parasites remind us, by their suckers, of the Entozoa, Annelida, and Crustacea; their feet are formed like the rudimentary extremities of the setigerous Annelida; their digestive apparatus allies them either to the Entozoa and the Annelida, or to the Arachnida; and their hermaphroditism has its analogue among the Entozoa, Annelida, Arachnida (Tardigrada), and Crustacea. As to their nervous system, it is unlike that of any other animals. The form of very young individuals has some similarity to that of the Tardigrada.—*Zeitschr. fur wiss. Zoologie*, ix. p. 48, 1857.